

2. (Amended) The method according to claim 1 wherein the telecommunications network elements are manufactured by different manufacturers.

3. (Amended) The method according to claim 1 wherein the telecommunications network elements are of different equipment types.

4. An element management system for a telecommunications network, comprising:

means for receiving, from a software application, a downstream element-independent network management message selected from a core set of downstream element-independent network management messages, for transmission to a telecommunications network element;

means for mapping the downstream element-independent network management message into a downstream element-dependent network management message, and into an element-dependent protocol, for the telecommunications network element; and

means for transmitting the downstream element-dependent network management message to the telecommunications network element.

5. An element management system according to claim 4, wherein the core set of downstream element-independent network management messages results from the method of claim 1.

6. An element management system according to claim 4, wherein the core set of downstream element-independent network management messages comprises a reduced number of downstream network management messages supporting basic telecommunications network management functionality.

7. An element management system for a telecommunications network, comprising:

means for receiving an upstream element-dependent network management message from a telecommunications network element;

means for mapping the upstream element-dependent network management message into a upstream element-independent network management message selected from a core set of upstream element-independent network management messages, and into a common element-independent message protocol; and

means for transmitting the upstream element-independent network management message to a software application.

8. An element management system according to claim 7, wherein the core set of upstream element-independent network management messages results from the method of claim 1.

9. An element management system according to claim 7, wherein the core set of upstream element-independent network management messages comprises a reduced number of upstream network management messages supporting basic telecommunications network management functionality.

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10. An element management system for a telecommunications network, comprising:

means for receiving an unsolicited element-dependent network management message from a telecommunications network element;

means for mapping the unsolicited element-dependent network management message into an element-independent network management message identifying the telecommunications network element and the nature and priority of the unsolicited element-dependent network management message; and

means for transmitting the element-independent network management message to a software application.

11. (New) The system of claim 4 wherein each of the core set of network management messages represents one of multiple telecommunications network management functions, the multiple telecommunications network management functions including functions for configuration and monitoring and control of the telecommunications network elements.

12. (New) The system of claim 4 wherein the telecommunications network includes multiple telecommunications network elements that are network devices of multiple types, the multiple types including at least radio devices and fiber optic devices.

13. (New) A method for developing a core set of messages for use in a management system for a telecommunications network, the method comprising:

for each of a plurality of telecommunications network element devices of multiple distinct types that support distinct sets of network management functions, identifying the network management functions available for managing that network element device;

selecting network management functions for use with all of the telecommunications network element devices, the selected network management functions being a subset of the identified network management functions; and

for each of the selected network management functions, creating an element-independent telecommunications network management message to represent that network management function such that the created element-independent telecommunications network management messages all use a common management message protocol.

14. (New) The method of claim 13 wherein the selected network management functions include the identified network management functions that are common to all of the telecommunications network element devices.

15. (New) The method of claim 13 wherein the selected network management functions include functions for configuration and monitoring and control of the telecommunications network element devices.

16. (New) The method of claim 13 wherein the selected network management functions include functions for one or more of retrieving performance data from a telecommunications network element device, retrieving operational status information for a telecommunications network element device, and updating protection status for a telecommunications network element device.

17. (New) The method of claim 13 wherein the selected network management functions include functions for each of retrieving performance data from a telecommunications network element device, setting performance management threshold values for a telecommunications network element device, retrieving operational status information for a telecommunications network element device, and updating protection status for a telecommunications network element device.

18. (New) The method of claim 13 wherein the plurality of telecommunications network element devices includes one or more radio devices and one or more fiber optic devices.

19. (New) The method of claim 13 wherein the telecommunications network element devices include multiple radio devices, and wherein the selected network management functions include a function for ensuring that a protection channel of a radio device can carry traffic without actually switching traffic to the protection channel.

20. (New) The method of claim 13 wherein the telecommunications network elements include multiple fiber optic devices, and wherein the selected network management functions include a function for retrieving, performing and removing a cross-connection on a fiber optic device.

21. (New) The method of claim 13 including, after the creating of the element-independent telecommunications network management messages for the selected network management functions, sending the created element-independent telecommunications network management messages to the telecommunications network element devices in order to perform the selected network management functions that are represented by those sent messages.
